

Information Dominance, Agile Acquisition and Intelligence Integration

An Interview With Terry Simpson, PEO C4I's Principle Deputy for Intelligence

By Kara McDermott, SPAWAR Public Affairs

FORCEnews: You have a rather unique position at SPAWAR, considering you're assigned to the acquisition community by the Director of Naval Intelligence. Could you explain your role?

Simpson: My role is Defense Intelligence Senior Level (DISL) executive assigned by the Deputy Chief of Naval Operations for Information Dominance (OPNAV N2/N6) as the senior intelligence liaison to the Navy's acquisition community. As a DISL, I occupy a Navy intelligence executive billet, plus I am a member of the Navy's acquisition professional community in my position as PEO C4I's principal deputy for intelligence. This position was created and placed at PEO C4I to directly advise and influence the Navy's intelligence acquisition activities through the programs of record and other initiatives we manage.

Since this position was created, numerous significant changes have occurred across the Navy. The Chief of Naval Operations (CNO) reorganized leadership responsibilities across the Navy's information domain to create the OPNAV N2/N6, Fleet Cyber Command (10th Fleet), and Navy Cyber Forces Command organizations. These changes across the Navy's information domain are influencing and broadening the expectations of PEO C4I and Team SPAWAR, and, likewise, have helped to shape my role. A significant amount of my focus is placed on externally-linked activities to build and maintain the key partnerships needed to achieve the Navy's vision for Information Dominance. This is a unique and very interesting position during a time of significant transformation across the Navy's information domain!

FORCEnews: What are your goals and objectives in this position?

Simpson: Since the beginning, my primary goals in this position have been to:

Drive more agile acquisition of C4ISR capabilities in support of the Navy's Information Dominance vision.

Influence coordination and synchronization of ISR, information operations and cyber investments and strategy across operational and acquisition boundaries, to include science and technology, the joint services and the greater intelligence community.

Champion top priorities of senior Navy leadership to deliver cost-wise results in meeting warfighter needs in the information domain.

Given these goals, my top priorities for 2011 are as follows:

- Lead innovative C4ISR acquisition and fielding initiatives and champion all efforts under PEO C4I Strategic Goal #2 – "Rapid Capabilities to the Warfighter."
- Lead the development of the PEO C4I data strategy in alignment with Team SPAWAR and the Navy.

- Guide the Navy acquisition community's focus on processing, exploitation and dissemination capabilities and mission needs.

In addition to these priorities, I'll continue working to increase synergy across our portfolio as we deliver transformational ISR, command and control, information operations and meteorological and oceanographic capabilities to meet fleet requirements. We also partner with the greater Department of Defense intelligence community to develop the intelligence workforce and leverage best practices. I'll continue to work closely with our program offices on all efforts to ensure we're pursuing a strategic approach while delivering critical capabilities to the warfighter.

FORCEnews: What stakeholders do you primarily interact with? And what are some of the key initiatives that you are working on with these stakeholders?

Simpson: Depending upon the subject, I collaborate with a number of key stakeholders on partnership efforts and on the strategic direction of specific ISR and information operations initiatives. I also interact at the leadership level with organizations inside and outside the Navy to try to solve some of the hard acquisition problems we face in today's military environment. I'll highlight a couple of key initiatives that I'm currently working on with the Marine Corps and OPNAV N2/N6.

In partnership with the Headquarters Marine Corps' Intelligence Directorate (HQMC-I), we are collaborating to establish a governance and process model appropriate for rapid adaptive discovery and / or development, test, certification and deployment of naval ISR capability. Meanwhile, a senior DoD IT Acquisition Reform Task Force is executing against a Congressional mandate, per 2010 NDAA Section 804, to revamp IT acquisition processes. The task force is considering innovative IT acquisition initiatives to serve as exemplars for the DoD way ahead. Preliminary discussions within the Navy and the Office of the Secretary of Defense indicate that our joint HQMC-I and PEO C4I project may be well-suited to assist in mapping out new processes.

As follow-on to the Maritime ISR Enterprise Acquisition review, I am working with PMW 120 and N2/N6 leadership to examine the concepts of operation for the operational intelligence Tasking, Collection, Processing, Exploitation and Dissemination (TCPED) functions. This essentially considers the entire intelligence process, and will drive scalable and flexible IT solutions for effectively integrating unmanned systems operations as well as other new sensor platforms. Our infrastructure and processing, exploitation and dissemination capabilities should appropriately scale across platforms, and they need to address manned and unmanned systems in the undersea, surface, aviation and space domains.

FORCEnews: What are the major challenges/obstacles you see in achieving your goals?

Simpson: Obviously financial resources are a top concern to everyone. We are working under a continuing resolution in Congress right now and so we can't afford to waste any financial resources or miss any opportunities to be innovative. As Secretary Gates has said, it would be a disaster for the military to be running on a yearlong continuing resolution because many of our programs would be negatively impacted.

Just recently, the CNO commented in *National Defense Magazine* that he “has directed Navy planners to boost funding and to speed up the design and production of unmanned systems. But he cautioned against pouring money into technological pipedreams that the Navy can’t afford.” When investing in unmanned platforms, a major consideration that cannot be overlooked by planners are the resources, systems and infrastructure needed to connect the platforms to deliver an end-to-end warfighting capability.

In a larger context of the Navy’s Information Dominance vision, personnel resources and workforce development could prove to be one of the major challenges. This is why the Deputy CNO for Information Dominance created the Information Dominance Corps (IDC) last year. Creation of the corps provides a more comprehensive capability for addressing the Navy’s current and future information workforce needs. In addition, we need to have acquisition trained members in the IDC who are capable of assisting in the requirements and budgeting processes, and operators who understand how to engage and make acquisition processes more effective for delivering the right capabilities in a timely fashion. This will enable operational personnel to better understand the delicate balance of priorities that must be navigated so that they can help set realistic, affordable and prioritized requirements for the information capabilities we deliver.

FORCEnews: What kind of involvement do you have with industry?

Simpson: I, and other PEO C4I leadership, meet periodically with industry partners and non-traditional partners to learn about technologies and best practices in areas such as data strategy, cloud computing and cyber security. Additionally, I gain exposure to various perspectives and approaches from players across the intelligence community. One fortunate aspect of my position is that I don’t have to fulfill a source selection official role for any of our programs. This enables me additional freedom to interact with industry and potential non-traditional partners in discussing technologies, methodologies and strategies.

Just last month we met with Bloomberg officials to discuss cyber security and how they integrate it into their business. For Bloomberg, transparency is a critical aspect of their corporate culture, which cannot be overstated. It’s pervasive throughout the corporation and exemplified by their all-glass headquarters building with few internal walls. Transparency is critical to Bloomberg’s credibility with customers in trusting the economic data provided, and the organization demands total transparency from their 30,000 data suppliers and news reporters/news providers. We also discussed cyber security with Bloomberg. With more than 300,000 subscribers to Bloomberg’s service and real-time data sets from 30,000 providers, complete financial transactional data collected on every tick of every market exchange around the globe requires a vast and secure corporate network infrastructure. Due to the sheer size of data manipulated, and the financial implications of timeliness required to support global market transactions, Bloomberg requires millisecond response times to news and market data, making the 30,000 Bloomberg “Terminal” applications a defacto economic “command and control” system for our nation’s, and arguably the global economic engine.

Traders around the world make large financial transactions in split-second timeframes based on complete and timely market data provided by Bloomberg. In order to support these 30,000 financial applications (for stocks, bonds, mutual funds, commodities and all manner of financial

instruments), some commercial applications are used, but a majority of tools are developed in-house by Bloomberg. Bloomberg has even written its own network protocol stack, forgoing the TCP/IP standard to support assured millisecond data delivery. It's interesting to compare and draw lessons-learned from industry leaders outside the defense sector.

In addition to Bloomberg, we have visited with more traditional industry partners as well to learn some of their best practices which could be applied to PEO C4I deliverables. It's all about mission-driven results no matter what industry you're in.

FORCEnews: There has been much discussion here recently about Information Dominance. What exactly is Information Dominance?

Simpson: Information Dominance is a hot term now used by our Navy leadership and even across many circles in the intelligence community and Department of Defense. While many may now be familiar with the term in the context of the creation of the Deputy CNO for Information Dominance, this term has been at the heart of our PEO C4I vision statement, "Information Dominance-- Anytime, Anywhere," for about four years now. And to some degree, many of us may still wonder just what does Information Dominance really entail? And perhaps even more pointedly, what does it look like?

Information Dominance combines elements of communications, intelligence, information operations, decision support and the control of forces. It does not necessarily mean more data than our adversaries, but rather the ability to quickly link multiple streams of data together and distill the volumes of data into useable information and contextual knowledge that can be acted upon quickly. The ultimate goal is for our warfighters to achieve an operational advantage in a conflict, or to control the situation in operations other than war, while denying those capabilities to an adversary. Fundamentally, it's about collecting and transforming data into knowledge in order to take action and create desired effects.

I often like to close speeches with a reminder that "Information Dominance is an enterprise mandate," and with that I stress that Team SPAWAR and PEO C4I need to lead the way in working across organizational boundaries in support of the Information Dominance vision.

FORCEnews: How do you see Team SPAWAR supporting Fleet Cyber Command and the Information Dominance Corps?

Simpson: Team SPAWAR has the unique ability to provide the acquisition perspective to the operational side of the Navy. PEO C4I leadership is in constant contact with Fleet Cyber Command / Commander 10th Fleet (C10F) in discussing cyber security, offensive and defensive strategies. This allows us to share with C10F and Navy partners our ISR / cyber concerns and what initiatives we are working on in the area. PMW 790 (Shore and Expeditionary Integration) just hosted a Situational Awareness Summit with C10F, and PMW 130 (Information Assurance and Cyber Security) is participating in a conference with C10F to discuss the current cyber threat and collaborate on how to move forward with some of our sister PEOs.

We are also working with OPNAV to develop an Information Dominance Corps that will support an acquisition professional career path as well. Recently I lectured at the IDC Mid-Career Officer

Course to provide an understanding of the acquisition process and how we contribute to the Navy and the Information Dominance vision. I also have been working with Rear Adm. Brady and Katherine Flattery (OPNAV N2/N6C1) to help design the IDC's acquisition career path.

FORCEnews: What do you see being the future of acquisition and intelligence?

Simpson: I believe that in the future, the entire intelligence process will be far more integrated and interactive with other services and national agencies. We live in a connected world, and we will see our traditional intelligence methodologies evolve around our connectedness. We must all be communicating with common technologies and be able to share information in a robust and scalable way with one another. This will greatly reduce redundancy in efforts and also provide greater fiscal benefits – and given the economic and budgetary landscape we will have no choice but to innovate and collaborate.

I believe we will also see greater flexibility and customization of capabilities by the end user / warfighter based on software-intensive technologies. I also envision an acquisition process that is more agile and adaptable to meet the warfighter's emerging needs and to field IT capabilities, or deliver IT services, in much shorter timeframes. Right now PMW 120 is sponsoring a study by RAND on tasking, collection, processing, exploitation and dissemination, which I think will really help us understand new perspectives on the future of acquisition and intelligence. The purpose of the study is to analyze options for manning, facilities, personnel, and data strategies associated with the Navy TCPED process.

FORCEnews: What's with all the orange?

Simpson: That is the best question you could have asked me! Besides being the best color ever, it represents Clemson University – I'm a proud Clemson engineering alumnus and rabid Tigers fan! Clemson alumni and the entire Tiger nation have a great tradition of wearing orange on Fridays, and I just like to take it a bit further! As you see in my office, I have Tigers paraphernalia everywhere so that South Carolina Gamecocks or North Carolina State Wolfpack alumni can come in and enjoy all the orange and tiger paws!